

Work Order ID 81107

March-08-12 8:49:10 AM

\*81107\*

Page 1

Item ID: D3391-023

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Mid Tube Assembly

Start Date: 08/03/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 22/03/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/03/09 Tooling:

Run Start \*NR1\*

QC: Date: SPC (Y/N):

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3391	I
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100

0.00

\*100\*

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Cut tube to finish length as per Dwg D3391

2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

3-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

4-Remove .030" from Fwd indexing Ridge as per Dwg D3391

5-Remove indexing ridge on Fwd &amp; Aft end of skidtube as per Dwg D3391

6-Deburr

7-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,  
\*\*\*DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG8-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391  
\*\*\*DO NOT OPEN 2 MOST FWD WEARPLATE HOLES\*\*\*

9-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391


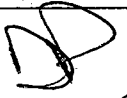


DC 12/04/02

DC 12/05/31

W/O: 81107		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3351-023 PAR #: \_\_\_\_\_ Fault Category: Landing Gear (Skid tube) NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: Acceptable Disposition: Acceptable QA: N/C Closed Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
12-05-08	100	Inner ridge reduced 0.030 ON APT END SIMILAR TO FWD. R.L. Humman Error / LON	 12-05-08 Q51042	Acceptable	DU 12/05/31	 12-5-31	 12-05-08 Q51042	 12/07/31

NOTE: Date & initial all entries

# Work Order ID 81107

\*81107\*

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March-08-12 8:49:10 AM

Item ID: D3391-023

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Mid Tube Assembly

Start Date: 08/03/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 22/03/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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10-Open .375" holes to .438" \*\*\*do not open fwd saddle holes\*\*\*

11-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)

12- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allingment, open up previously tranfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021

13- Using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.

14- Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplte holes in D3391-021 using DT8937

15- Open 12 wearplate holes in D3391-021 to 0.297" dia.

16-Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.

De 12/05/31

110

QC5- Inspect part completeness to step on W/O

0.00

\*110\*

QC

Memo

0.00

Quality Control

5/26/34

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 81107****\*81107\***

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March-08-12 8:49:10 AM

Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Mid Tube Assembly  
Start Date: 08/03/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
Required Date: 22/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Chemical Conversion Coat per QSI005 4.1	0.00							
<b>*120*</b>									
HandFinish	Memo	0.00							
Hand Finishing									
130	QC7-Inspect Chemical Conversion Coat	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									

1 76 12-5-31

12-6-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
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 Start Date: 08/03/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 22/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Skidtubes	0.00							
<b>*140*</b>									
Skidtubes	<b>Memo</b>	0.00							
Skidtubes	1-Open float bag holes as per dwg 2-C'sink float bag holes as per dwg 3- Prepare tube for welding 4-Bond web in place as per Dwg D3391 & QSI 015. Adhere for 12 hours) A/R Sikaflex exp: <u>13-4-12</u> batch#: <u>121409</u> NOTE:ENSURE WEB IS INSERTED IN AFT END OF TUBE								
150	QC5- Inspect part completeness to step on W/O	0.00							
<b>*150*</b>									
QC	<b>Memo</b>	0.00							
Quality Control									

*Handwritten signature and date: 12-6-4*

*Handwritten date: 12-06-05*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



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**\*N900040100\***

Setup    Start    \*NS1\*

          Stop    \*NS2\*

<b>Start Date:</b>	08/03/2012	<b>Start Qty:</b>	1.00	<b>*1*</b>
<b>Required Date:</b>	22/03/2012	<b>Req'd Qty:</b>	1.00	<b>*1*</b>

**Cust Item ID:**  
**Customer:**

**Reference:**

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 81107

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Mid Tube Assembly  
 Start Date: 08/03/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 22/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185	Pressure Wash per QSI005 4.3	0.00							
<b>*185*</b>									
HandFinish	Memo	0.00							
Hand Finishing	AND REALODINE AS PER PAR09-043								
190	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
<b>*190*</b>									
Powdercoat	Memo	0.00							
Powder Coating	START TIME: 2:20 OVEN TEMPERATURE: 320°F FINISH TIME: 2:50								
200	QC3- Inspect Part Finish	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									

1746 12-6-7  
 1X 4 MX 12/06/07  
 1X 4 12/06/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 81107

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Mid Tube Assembly  
 Start Date: 08/03/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 22/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210		0.00							
<b>*210*</b>									
Skidtubes									
Skidtubes	Memo	0.00							
	✓ 1- insert D3391-021 into D3391-23								
	✓ 2- insert T-pins into first and third fwd saddle holes								
	✓ 3- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddles holes to 0.500" as per DSI 9364								
	✓ 4- remove T-pins and locate DT9415 from first and third crossbolt hole using T-pins and clekos								
	✓ 5- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499". Remove DT9415								
	✓ 6- deburr, re-alodine and blow out chips								
	✓ 7- press fit D3591-1 spacers using DT9416 starting from 0.500" side								
220									
<b>*220*</b>									
QC									
Quality Control	Memo	0.00							

1x 7 42 12106108

Salby

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*81107\***

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**\*N900040100\***

Setup	Start	*NS1*
	Stop	*NS2*

<b>Start Date:</b>	08/03/2012	<b>Start Qty:</b>	1.00	<b>*1*</b>
<b>Required Date:</b>	22/03/2012	<b>Req'd Qty:</b>	1.00	<b>*1*</b>

**Cust Item ID:**  
**Customer:**

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 81107****\*81107\***

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Item ID: D3391-023 Accept **\*N900040100\*** Setup Start **\*NS1\***  
Revision ID: Stop **\*NS2\***  
Item Name: Mid Tube Assembly  
Start Date: 08/03/2012 Start Qty: 1.00 **\*1\*** Cust Item ID:  
Required Date: 22/03/2012 Req'd Qty: 1.00 **\*1\*** Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC21- Final Inspection - Work Order Release	0.00							
<b>*260*</b>									
QC	Memo	0.00							
Quality Control									

12/6/11  
MF  
12-06-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
		✓						

**NOTE:** Date & initial all entries

March-08-12 8:49:14 AM

**\*81107\***

**\*D3391-023\***

**Required Date:** 22/03/2012

**Required Qty: 1.00**

<b>Comments:</b>	IPP A05.10.20New Issue				KJ/EC
	IPP B06.02.10ECN773 dwg rev.D				EC
	IPP C	07.03.20	rev F dwg		EC
	IPP D	07.03.28	re-format		EC
	IPP E	07.10.31	ecn 1053P		EC
	IPP Rev:F	ECN 1056	07-11-13	DD	verified by: EC
	IPP Rev:G	08-09-08	new process (ecn 08-510) DD verified by:EC		
	IPP Rev:H	08-09-10	revH as per dwg	DD	verified by:EC
	IPP Rev: I	08-11-13	Removed steps per w/o, QC KJ verified by: ec IPP		
	Rev:J	add in seq 140 expire date &b# sikaflex DD 10.02.17 verified by:EC			

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2500-1-100		Manufactured	No			100	Each	36.0000	1	1			
<p><b>*D2500-1-100*</b></p> <p>Skidtube Extrusion</p>													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				HALL				36					
				50251				36					
D3391-021		Manufactured	No			100	Each	0.0000	1				
<p><b>*D3391-021*</b></p> <p>Fwd Tube Assembly</p>													
D3389-1		Manufactured	No			140	Each	6.0000	1	1			
<p><b>*D3389-1*</b></p> <p>Web</p>													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				LG				6					
				80909				6					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 81107

**\*81107\***

Parent Item: D3391-023

**\*D3391-023\***

Parent Item Name: Mid Tube Assembly

Start Date: 08/03/2012

Required Date: 22/03/2012

Start Qty: 1.00

Required Qty: 1.00

D3681-1

Manufactured No

160

Each

107.0000

5

5

**\*D3681-1\***

Spacer

**\*\***

BE 12/06/05  
B 84053 x5

Location

Loc Qty

Loc Code

LG

63

80361

63

LG001

44

68958

2

69893

2

71845

2

74874

1

76004

2

77501

35

D3591-1

Manufactured No

210

Each

55.0000

2

2

**\*D3591-1\***

Bushing

**\*\***

M 1106102

Location

Loc Qty

Loc Code

FP

54

77496

14

80377

40

ST055

1

57350

1

13 83237

x7

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Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 81107

**\*81107\***

Parent Item: D3391-023

**\*D3391-023\***

Parent Item Name: Mid Tube Assembly

Start Date: 08/03/2012

Required Date: 22/03/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

230

Each

4,855.000

20

20

**\*AI S4-1032-130\***

**\*\***

*yl nlowlog*

Insert

Location

Loc Qty

Loc Code

ST280

681

*AA121269*

*x20*

119084

116

120671

565

ST281

4174

120410

174

120807

2000

120837

2000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

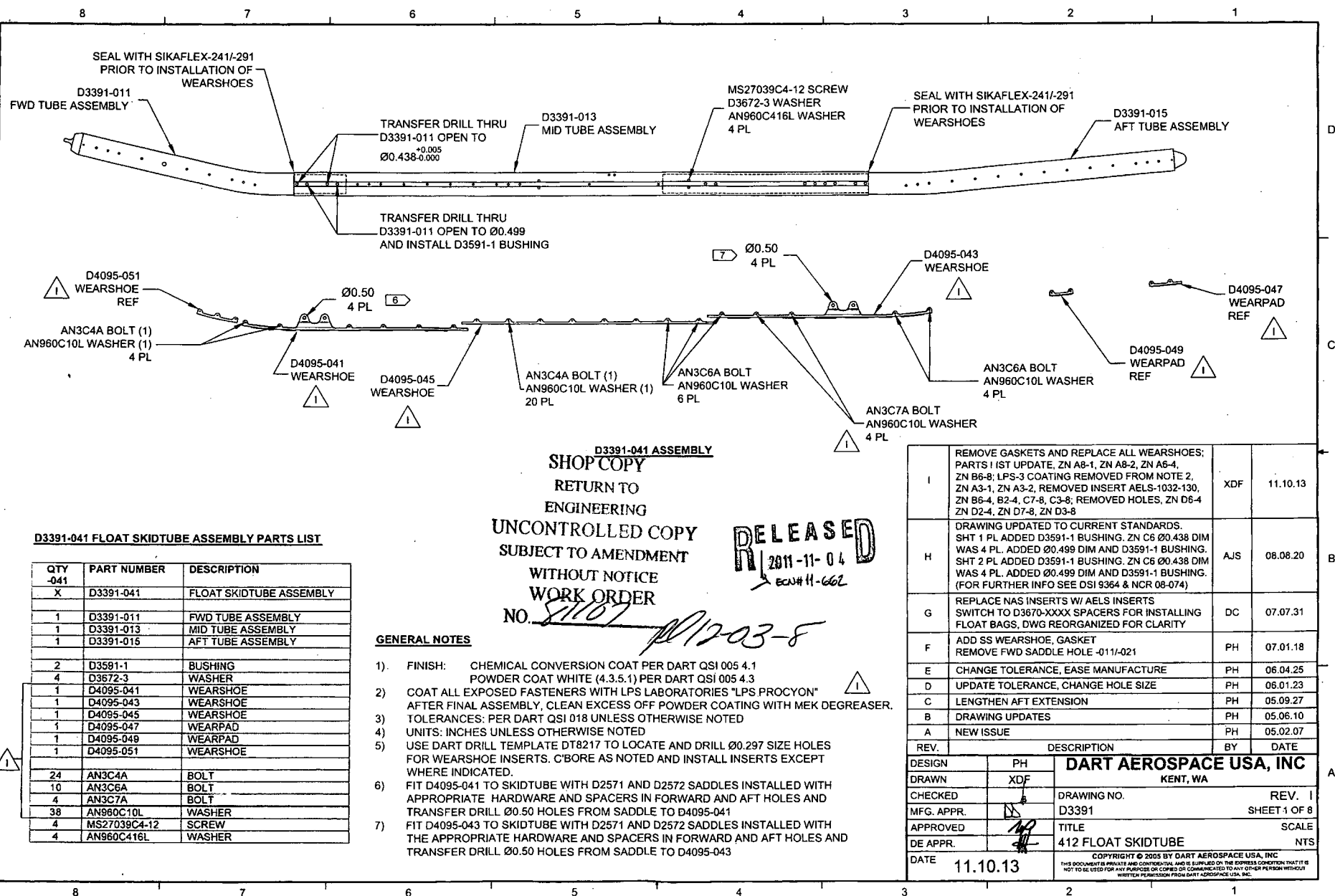
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





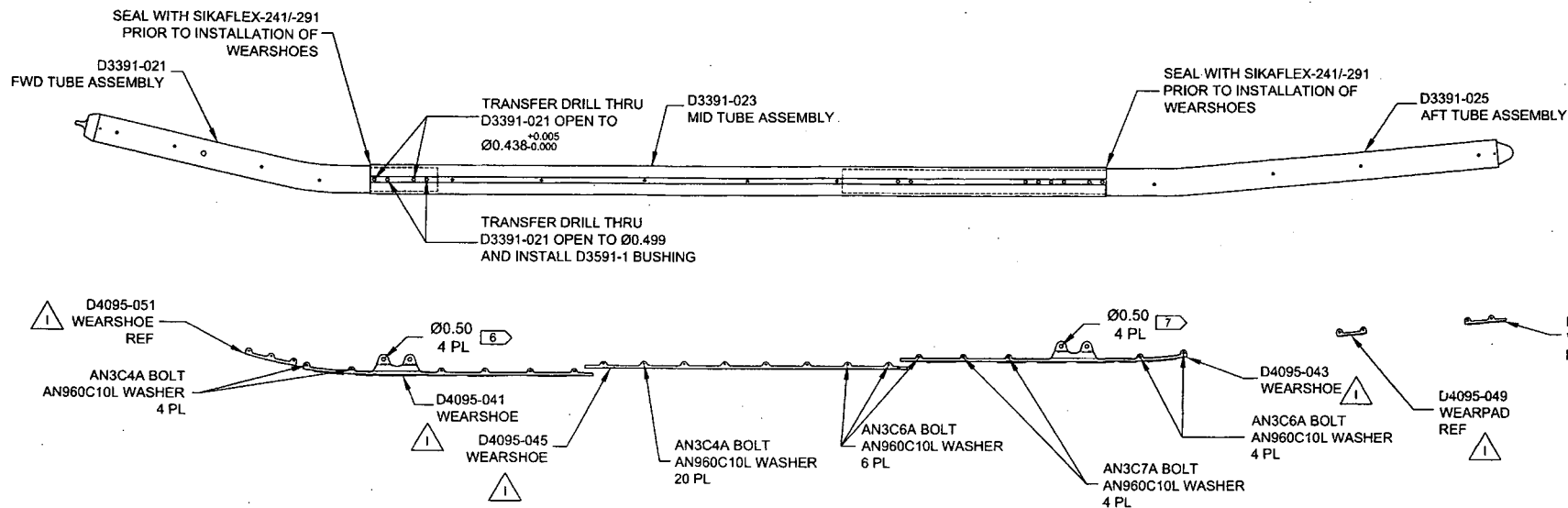
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



#### D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
2	D3591-1	BUSHING
1	D4095-041	WEARSHOE
1	D4095-043	WEARSHOE
1	D4095-045	WEARSHOE
1	D4095-047	WEARSHOE
1	D4095-049	WEARSHOE
1	D4095-051	WEARSHOE
24	AN3C4A	BOLT
10	AN3C6A	BOLT
4	AN3C7A	BOLT
38	AN960C10L	WASHER

#### GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.
- 6) FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041
- 7) FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043

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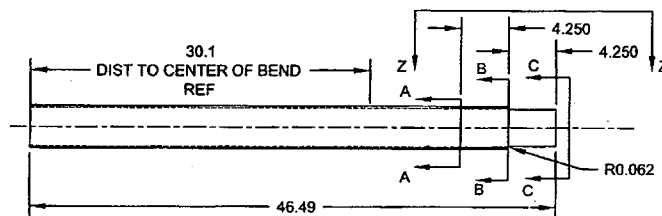
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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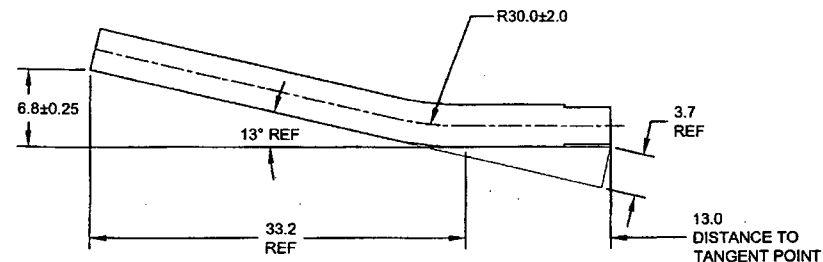
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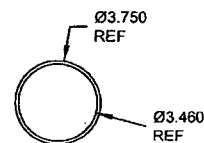
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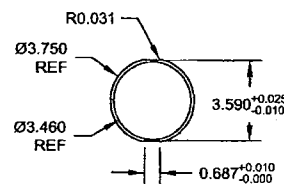
**D3391-1 CUTTING DETAIL**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



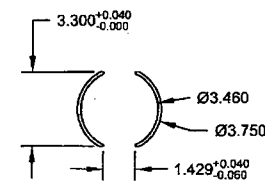
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



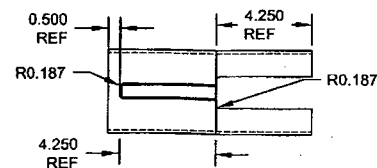
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**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

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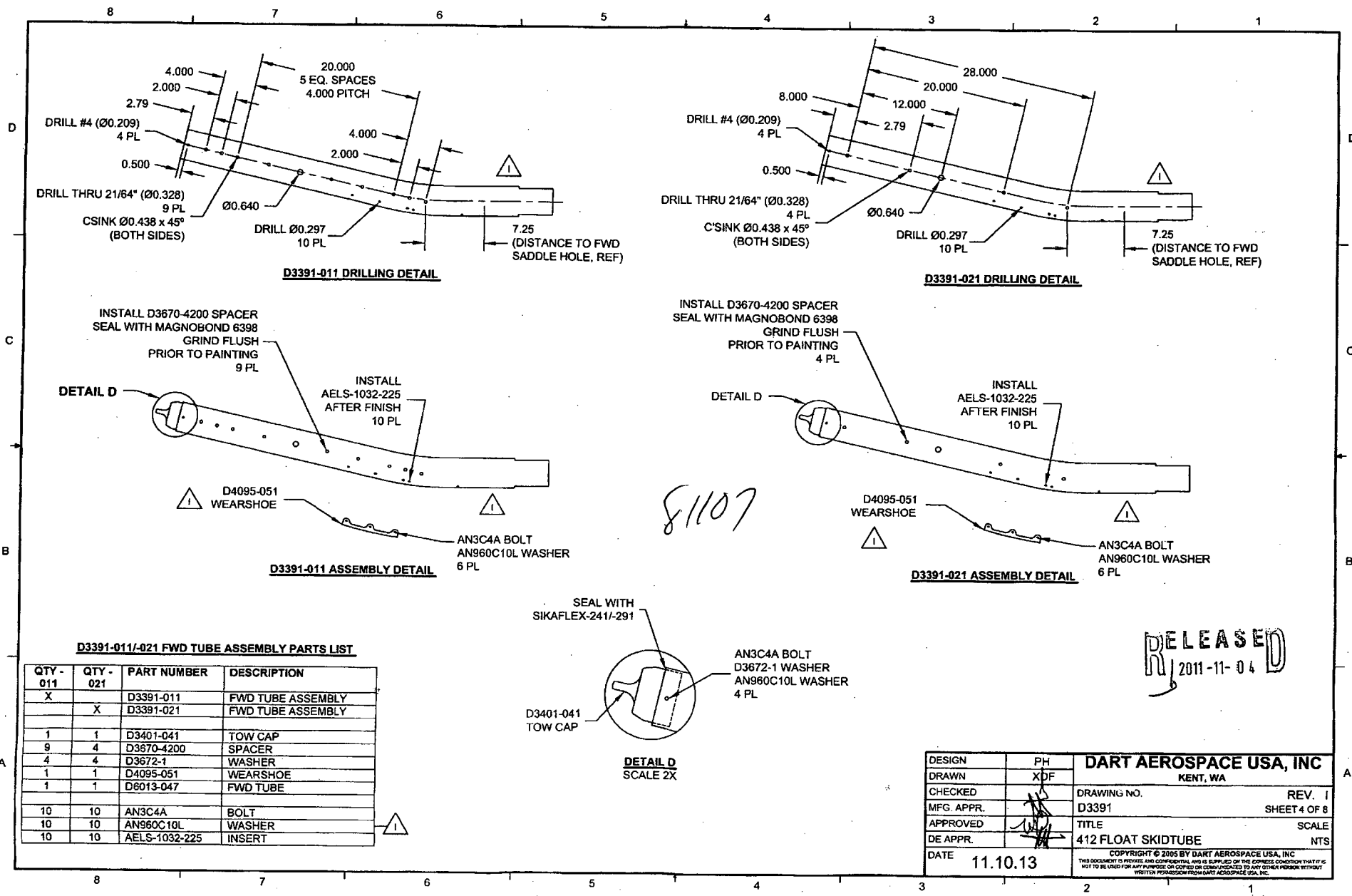
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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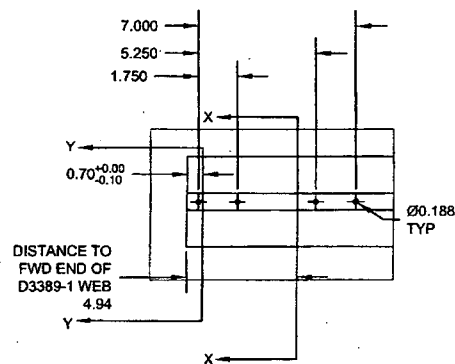
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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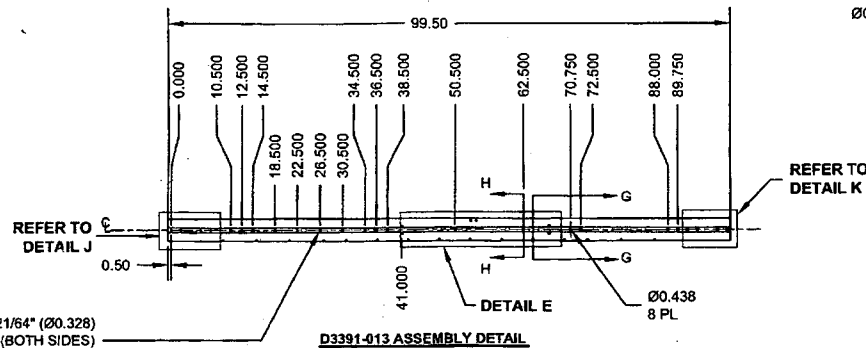
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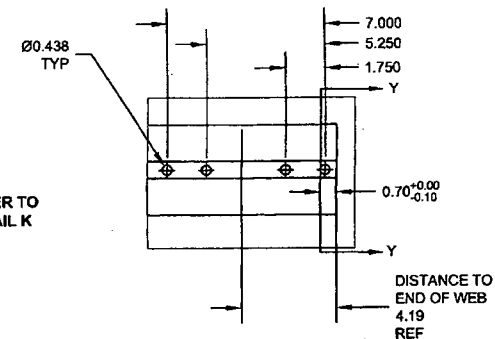
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DETAIL J  
SCALE 4X



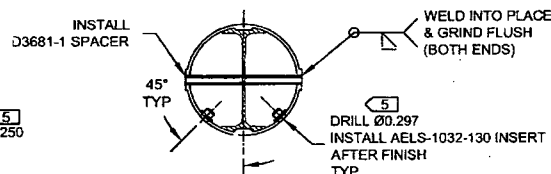
D3391-013 ASSEMBLY DETAIL  
SCALE 5X



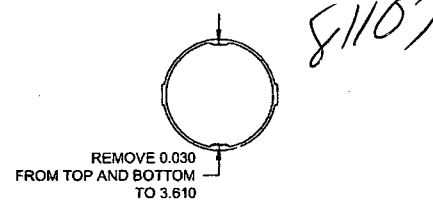
DETAIL K  
SCALE 4X



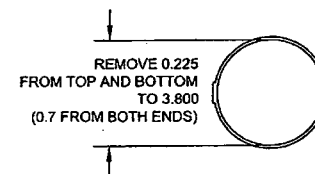
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SCALE 5X



SECTION H-H  
SCALE 5X



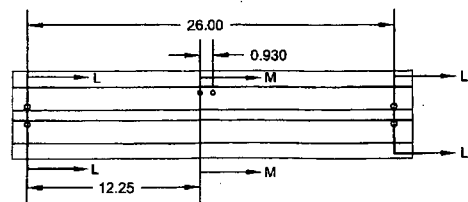
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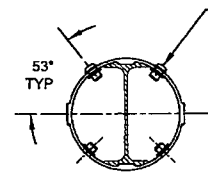
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D3391-013 MID TUBE ASSEMBLY PARTS LIST

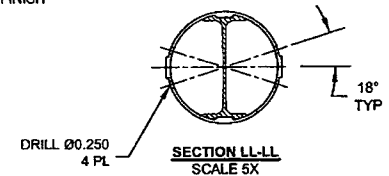
QTY	PART NUMBER	DESCRIPTION
-013		
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	AN960C10L	WASHER
4	AN960C416L	WASHER
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW



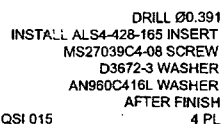
DETAIL E  
SCALE NONE



SECTION M-M  
SCALE 5X



SECTION LL-LL  
SCALE 5X



SECTION L-L  
SCALE 5X

D3391-013 MID TUBE ASSEMBLY

- MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- WELDING: PER DART QSI 004

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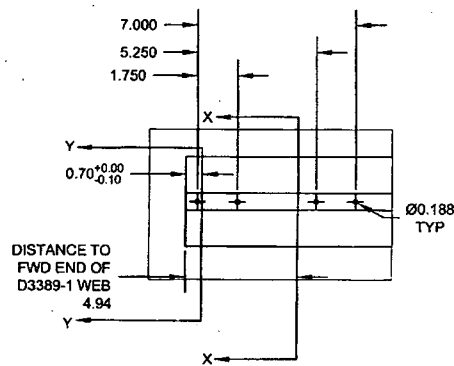
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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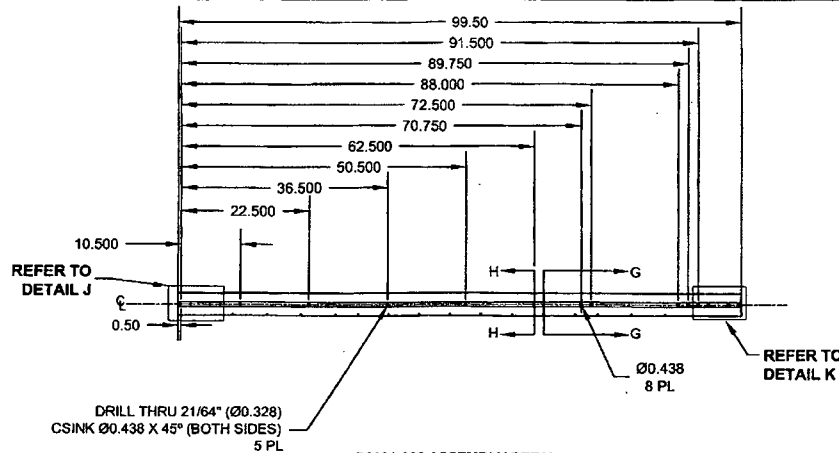
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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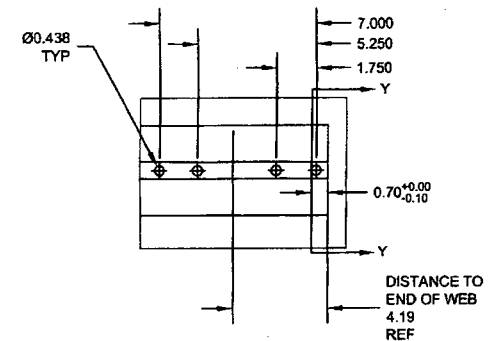
**NOTE:** Date & initial all entries



**DETAIL J**  
SCALE 4X



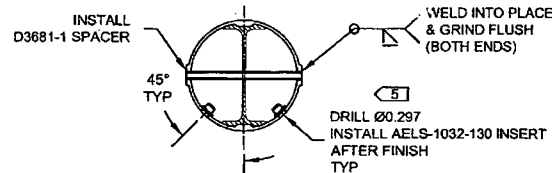
**D3391-023 ASSEMBLY DETAIL**



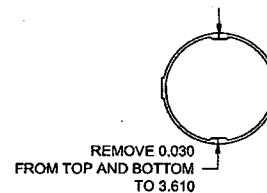
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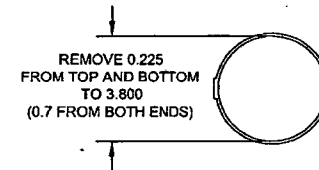
**SECTION G-G**  
SCALE 5X



**SECTION H-H**  
SCALE 5X



**SECTION X-X**  
SCALE 5X



**SECTION Y-Y**  
SCALE 5X

**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

QTY -	PART NUMBER	DESCRIPTION
023		
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

**D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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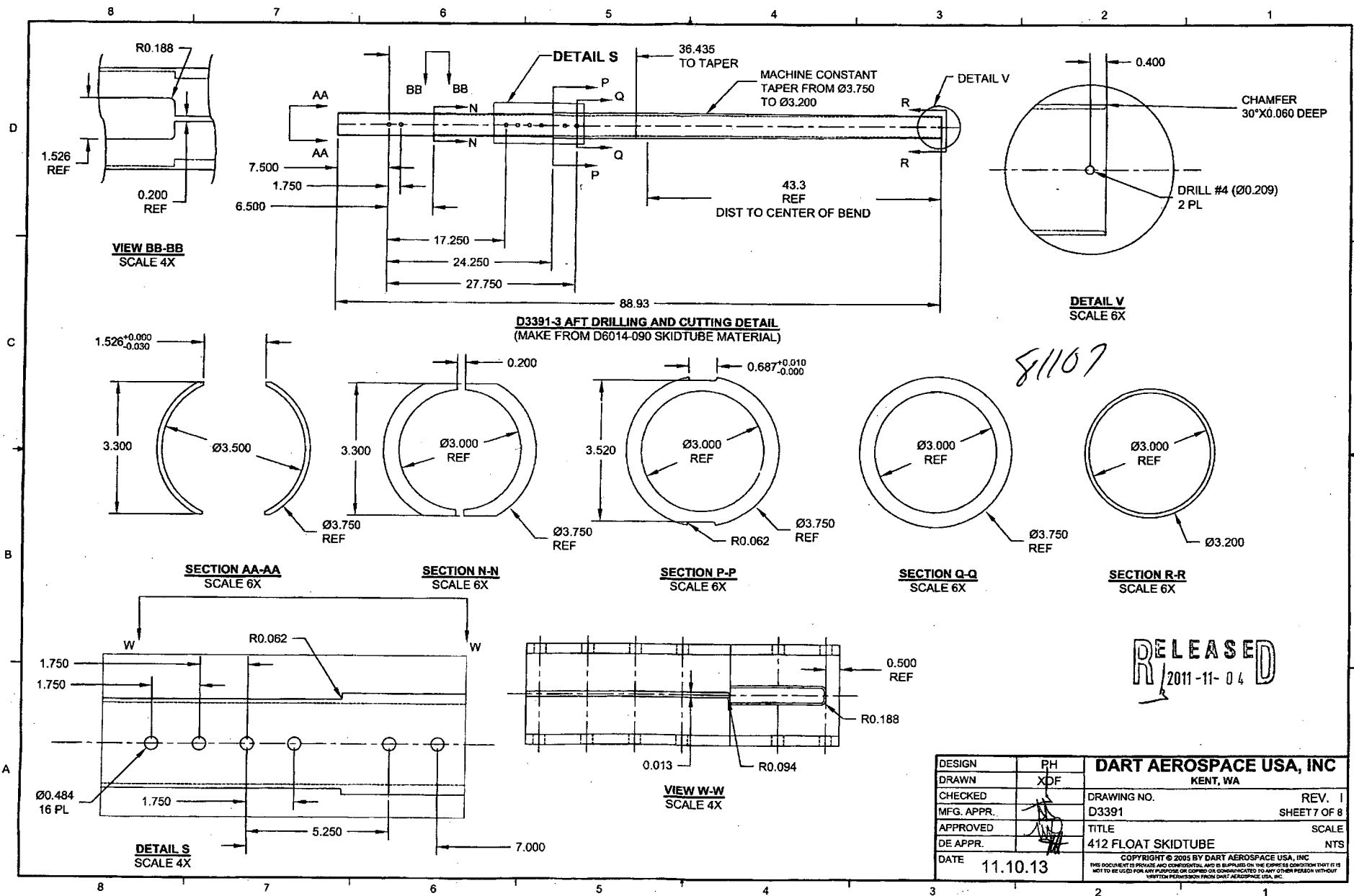
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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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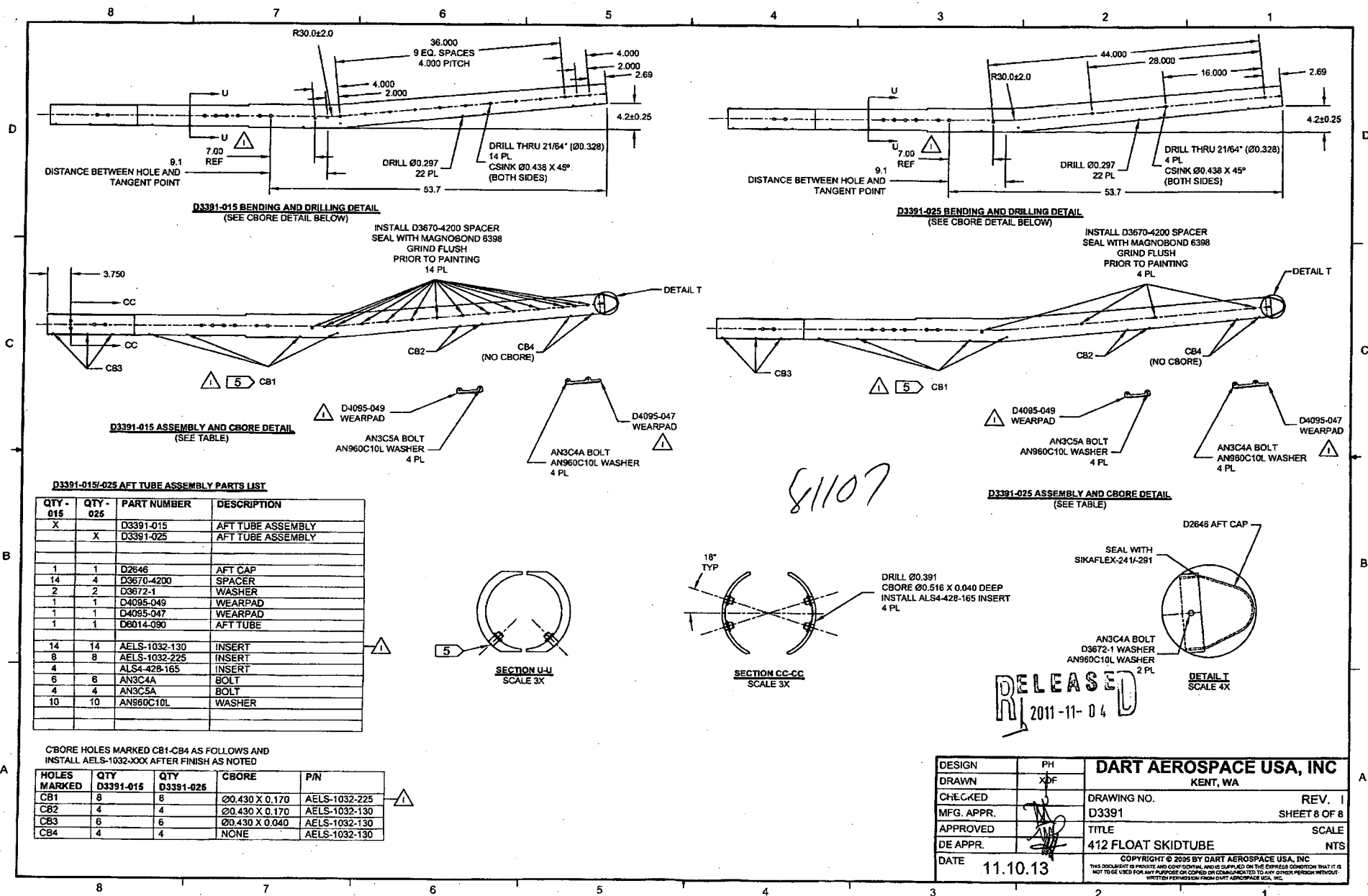
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**NOTE:** Date & initial all entries



NO. 296

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliott  
Job number: 85161  
Part number: A3391-023  
Description: Skid  
Welding Process: Tig[☒] Mig[ ]  
Base material: Alum  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:

pass[☒] fail[ ]

Penetration:

pass[☒] fail[ ]

UNACCEPTABLE

Cracks:

pass[☒] fail[ ]

Undercut:

pass[☒] fail[ ]

Pin holes:

pass[☒] fail[ ]

Overlap (cold lap)

pass[☒] fail[ ]

Porosity (surface):

pass[☒] fail[ ]

Coloration:

pass[☒] fail[ ]

Qualifier David Taylor

Date of Test Coupon 12-06-07

Welder Barclay Elliott

Date of Test Coupon 12-06-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld